



“FRACKING” AND CLEAN WATER: A SURVEY OF AMERICANS

**A Survey Conducted for
the Civil Society Institute**

December 21, 2010

The survey was conducted November 26-28, 2010 among a sample of 1,012 adults comprising 501 men and 511 women 18 years of age and older living in the Continental United States.

- Completed interviews are weighted by four variables: age, gender, region and race to ensure reliable and accurate representation of the total population, 18 years of age and older.
- The margin of error for results based on the total sample is plus or minus 3 percentage points.

Executive Summary

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A survey of 1,012 Americans conducted November 26-28, 2010 shows that the issue of hydraulic fracturing (known as "fracking") is emerging as a concern as it relates to drinking water safety. The survey also finds that Americans of all political persuasions prefer to see clean energy development that protects water supplies over traditional fossil fuel production. Key survey highlights include the following:

- Nearly three out of five Americans (57 percent) had at least some awareness of fracking as an issue, including "very aware" (19 percent), "somewhat aware" (25 percent), and "not very aware" (13 percent). (Of this larger group, a subset of 45 percent of Americans is very/somewhat aware.) A minority of Americans (43 percent) say they are "not aware at all" about fracking concerns. Interestingly, when compared to the 43 percent of Americans who are very/somewhat aware of fracking, Republicans (49 percent) and Independents (47 percent) are more likely than Democrats (39 percent) to know about the issue.**
- Among Americans who are very or somewhat aware of fracking, 69 percent are "very concerned" (40 percent) or "somewhat concerned" (29 percent) in terms of water quality issues. Less than a third said they were "not very concerned" (15 percent) or "not concerned at all" (16%). Concern about fracking and water quality is a bipartisan worry, including 57 percent of Republicans, 74 percent of Independents, and 86 percent of Democrats.**

- **Over half of Americans (56 percent) who are very/somewhat aware of fracking think state and federal officials are either “not doing as much as they should” (42 percent) or “not doing anything at all” (14 percent) to “require proper disclosure of the chemicals used in natural gas drilling.” Democrats (74 percent) and Independents (60 percent) are more likely than Republicans (43 percent) to fault government efforts to date.**
- **Nearly three out of four Americans (73 percent) very/somewhat aware of fracking would be “very concerned: (58 percent) or “somewhat concerned” (15 percent) to “have such an energy project close enough to your home that there was even a small chance that it could have an impact on your drinking water.” A majority of Republicans (56 percent), Independents (86 percent) and Democrats (91 percent) would be concerned to have such a project near their home.**
- **More than two out of three Americans (69 percent) very/somewhat aware of fracking would be “very likely” (42 percent) or “somewhat likely” (27 percent) to “get involved at the community level to raise concerns about ... a ‘fracking’ project” if one was “proposed close enough to your home that there might be an impact on the quality of your drinking water.”**

- **More than three out of four Americans (78 percent) would “strongly support” (49 percent) or “somewhat support” (29 percent) “tighter public disclosure requirements as well as studies of the health and environmental consequences of the chemicals used in natural gas drilling.” Fewer than one in five (16 percent) would oppose requiring such additional disclosure. More disclosure is supported across party lines by Republicans (74 percent), Independents (72 percent), and Democrats (85 percent).**
- **Nearly four out of five Americans (72 percent) would tell their Member of Congress, governor or state lawmaker: “When it comes to energy production that requires large amounts of water or where water quality is in jeopardy as a result of the energy production, my vote would be for coming down on the side of the public's health and the environment. We should favor cleaner energy sources that use the least water and involve the lowest possible risk to the public and environment.” Only about one in five (21 percent) would say the following: “When it comes to energy production that requires large amounts of water or where water quality is in jeopardy as a result of the energy production, my view is that energy production priorities have to come first. There is always going to be some risk involved when it comes to energy production. We have to accept that there are going to be tradeoffs when it comes to the public's health and the environment.” Clean water is favored over energy production by Republicans (62 percent), Independents (80 percent), and Democrats (82 percent).**

- **Where should America focus its energy production in the future? More than four out of five Americans (81 percent) agree that: “Water shortages and clean drinking water are real concerns. America should put the emphasis on first developing new energy sources that require the least water and have minimal water pollution.” Only about one in 10 agree that: “Energy supply needs should override concerns about water shortages and water pollution. America should proceed first with developing energy sources even if they may pollute water or create water shortages.” Water was favored over energy production here by Republicans (71 percent), Independents (88 percent), and Democrats (89 percent).**
- **Nearly two out of three Americans (65 percent) would pay up to 10 percent or more extra for “the development of renewable energy sources that protect the air and water better than other alternatives.” That includes: up to 10 percent more (29 percent); 10-25 percent more (25 percent); and 25-50 percent more (11 percent). Under one third of Americans (32 percent) would pay no additional amount for cleaner energy. Those who would pay more include Republicans (55 percent), Independents (59 percent), and Democrats (78 percent).**

- **Three out four Americans (75 percent) agree with the following statement: “Smarter energy choices are the key to creating new jobs and a future that is healthy and safe because fossil fuels create toxic wastes that are a threat to our health and safety.” Fewer than one in five Americans (22 percent) disagree with that statement.**
- **While the number of Americans who think that it is more urgent to protect “our drinking water from chemicals used in drilling for natural gas and from the wastes generated from burning coal” (18 percent) is about three times that who say the No. 1 concern is “addressing climate change and its impacts” (6 percent), a total of 66 percent say that “these are both major concerns of roughly equal concern” (66 percent). Interestingly, protecting drinking water from natural gas drilling chemicals and coal waste was the No. 1 concern of 26 percent of Republicans, 20 percent of Independents, and only 11 percent of Democrats.**

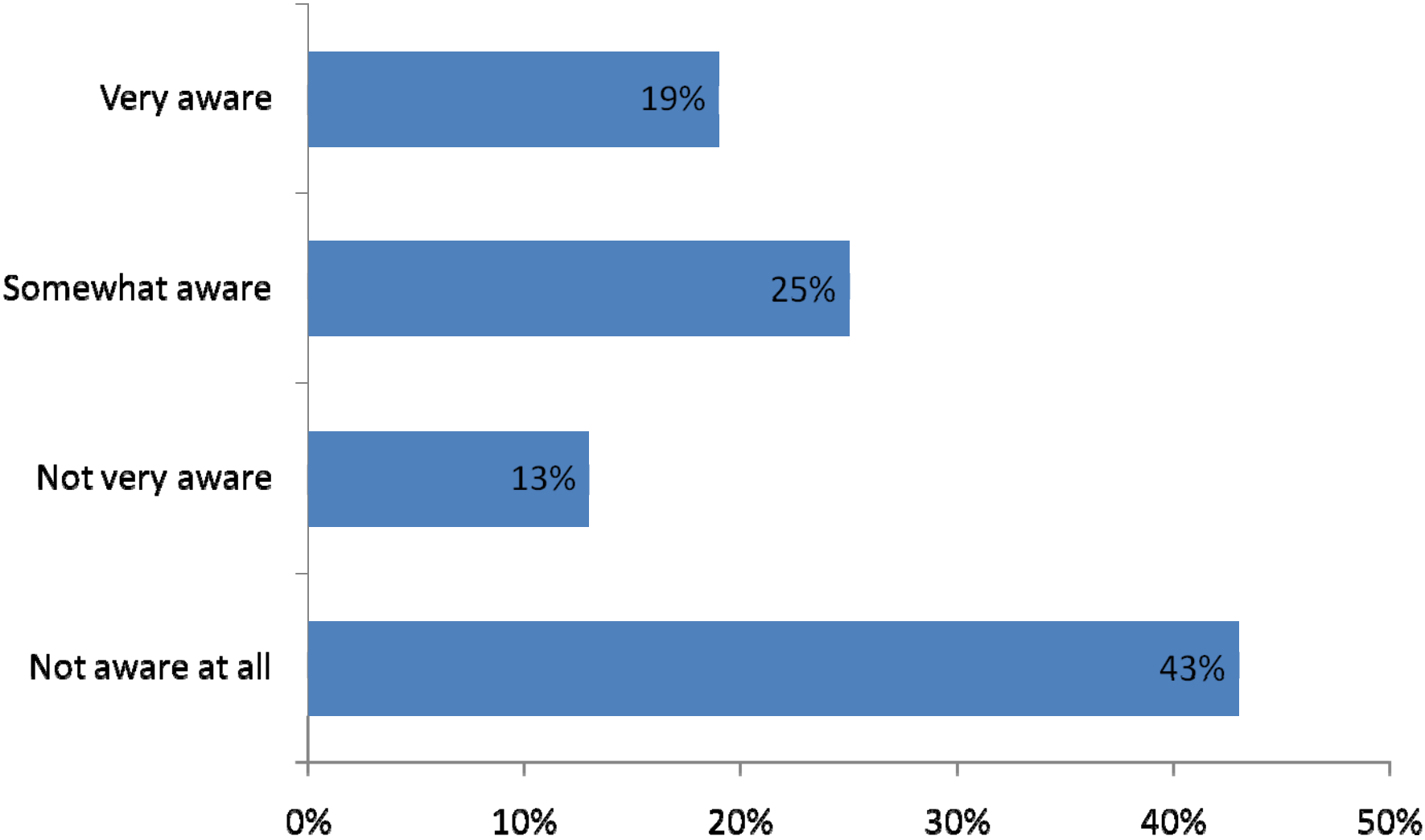
Detailed Findings

Awareness of the Issue of “Fracking”

Just less than half of American adults (43%) are very/somewhat aware of the issue of fracking.

- Men are more likely than women to be aware (52% vs. 35%).
- The younger the respondent, the less likely they are to know what the issue is. Thirty-four percent of those age 18-34 are aware of fracking compared to 58% of those age 55-64 and 51% of those age 65 and over.
- Those in the South (37%) are the least likely to be aware of the issue.
- Respondents with a college degree are more likely to be aware of fracking (51%) than are those with less than a high school education (37%).
- Across party lines, awareness is relatively similar with 49% of Republicans, 47% of Independents and 39% of Democrats aware.

Awareness of the Issue of Fracking

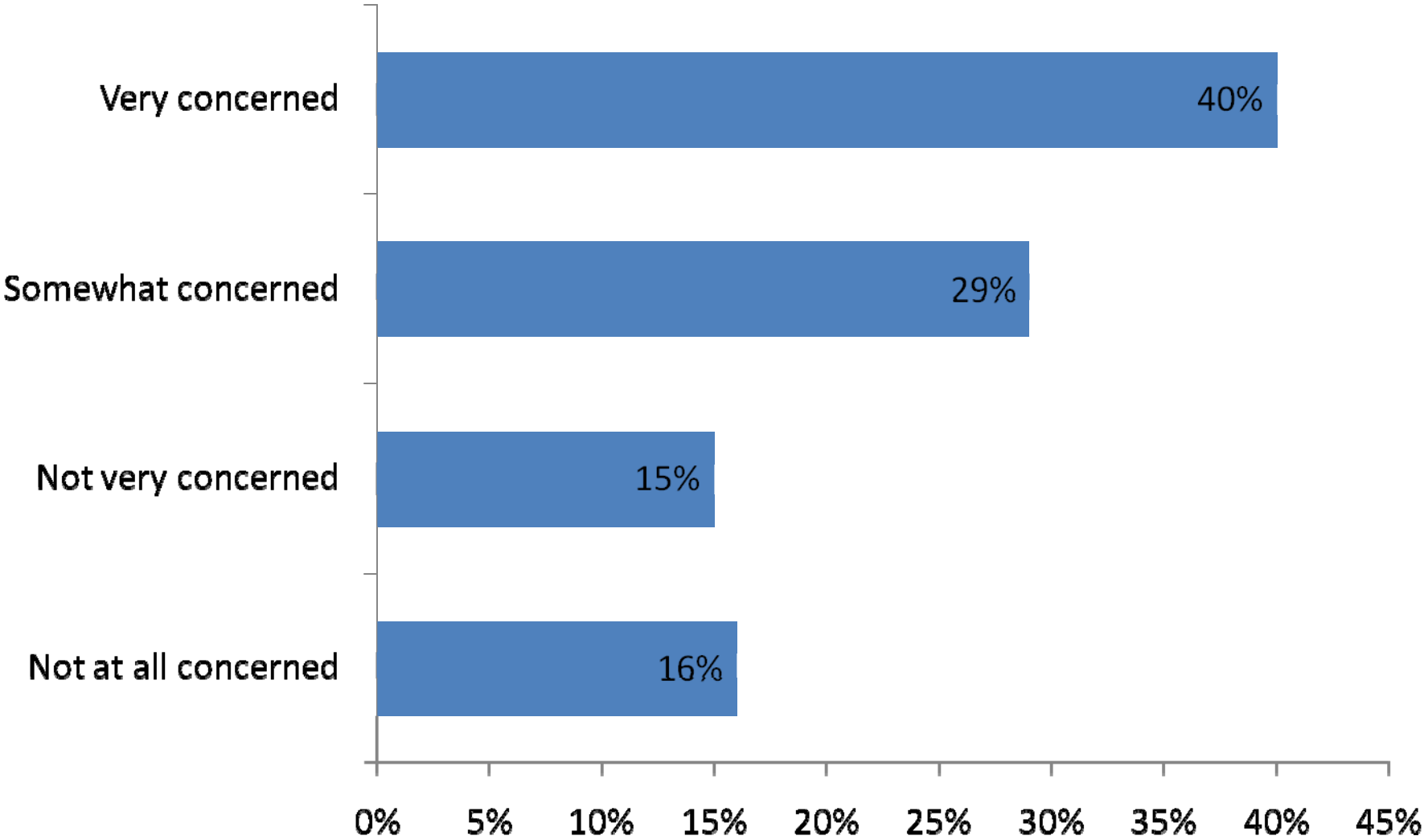


Concern About Fracking and Water Quality

Among those aware of fracking, seven out of 10 are concerned (69%) about the issue and how it relates to water quality. Three in 10 (30%) are not concerned.

- Women are more likely than men to be concerned about fracking and water quality (78% vs. 63%).
- While still a majority, concern is lowest in the South (66%).
- Across party lines, concern is greatest among Democrats (86%), somewhat lower among Independents (74%) and lowest among Republicans (57%).

Concern About Fracking and Water Quality



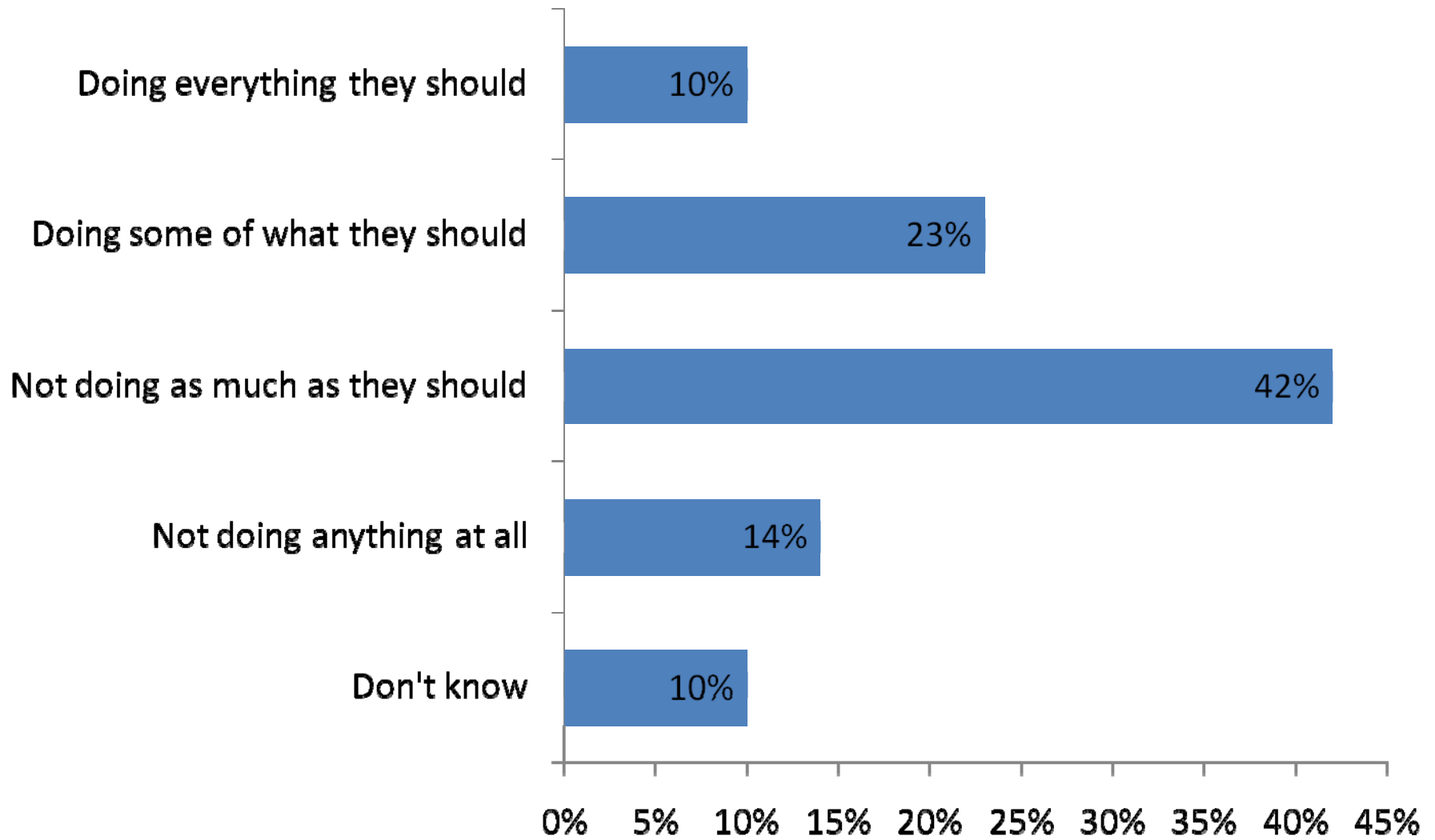
Q2: Still thinking about the natural gas drilling process sometimes referred to as fracking, how concerned are you about this issue as it relates to water quality? Base = 493 aware of fracking.

Disclosing the Chemicals Used in Natural Gas Drilling

More than half (56%) of those aware of fracking say the government is not doing enough to require disclosure of the chemicals used in natural gas drilling. One third (33%) think the government is doing enough.

- Democrats are the most likely to think government isn't doing enough in this area (74%) compared to 60% of Independents and 43% of Republicans.

Disclosing the Chemicals Used in Natural Gas Drilling

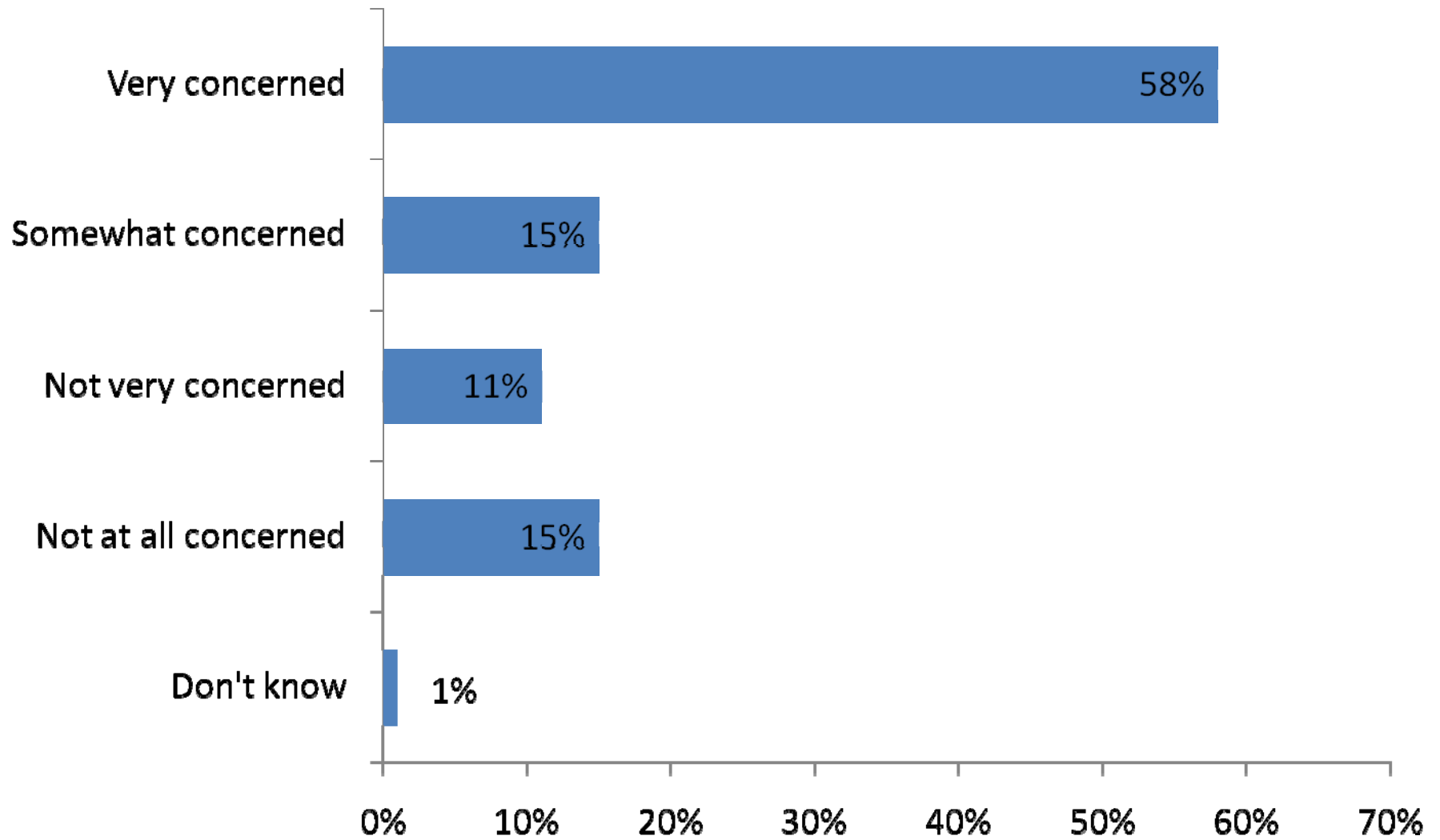


Concern About Fracking Close Enough to Impact Drinking Water

Nearly three-fourths (72%) of those aware of fracking would be concerned about the process if there was an energy project close enough to their home that there was even a small chance it would affect their drinking water. One quarter (26%) would not be concerned.

- Women are substantially more likely to be concerned about this than men (81% vs. 66%).
- Democrats are the most likely to be concerned (91%), compared to 86% of Independents and 56% of Republicans.

Concern About Fracking Close Enough to Impact Drinking Water



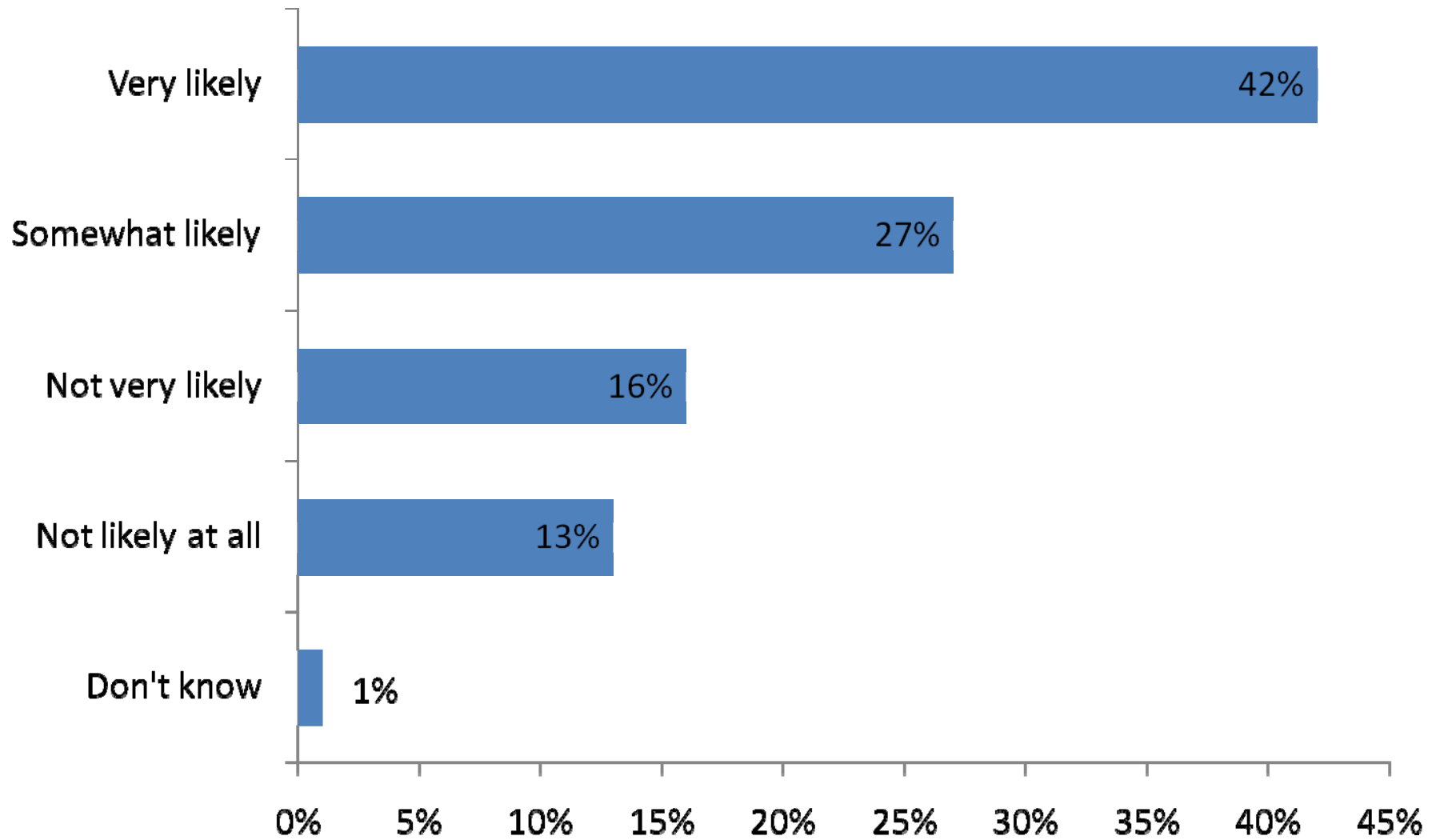
Q4: Based on what you know or have heard about the chemicals used in fracking, how concerned would you be to have such an energy project close enough to your home that there was even a small chance it could have an impact on your drinking water. Base = 493 aware of fracking.

Getting Involved Locally to Raise Concerns About Fracking

Seven out of ten (70%) of those aware of fracking, would be likely to get involved locally if an energy project was close enough to their home that it might impact the quality of their drinking water. Three in ten would not get involved (29%).

- Men are more likely than women to say they would not get involved (34% vs. 23%).
- Democrats are the most likely to say they would get involved (85%) compared to 67% of Independents and 58% of Republicans.

Getting Involved Locally to Raise Concerns About Fracking



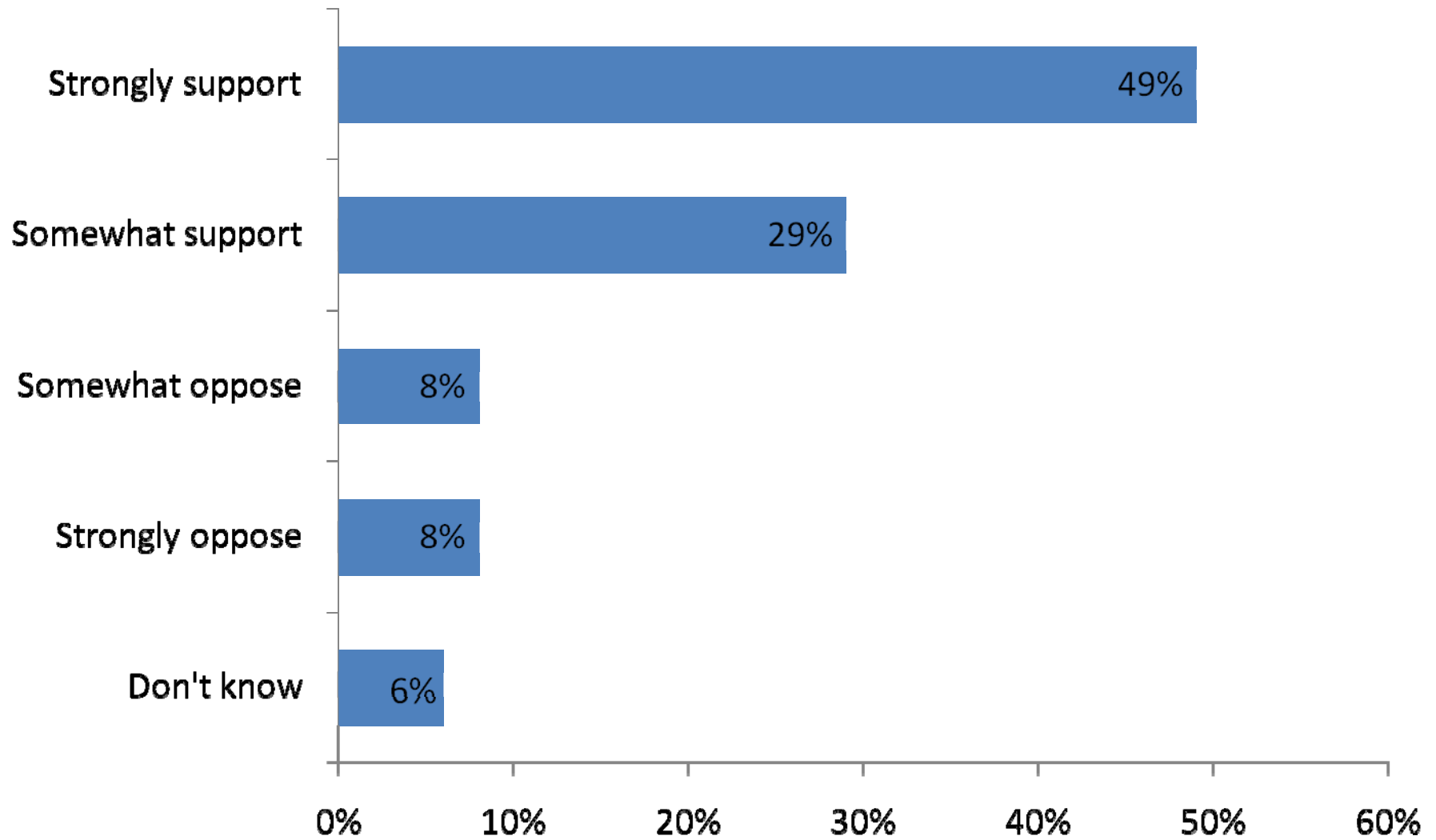
Q5: Imagine a situation where a natural gas drilling project was proposed close enough to your home that there might be an impact on the quality of your drinking water. How likely would you be to get involved at the community level to raise concerns about such a fracking project? Base = 493 aware of fracking.

Favoring Tighter Public Disclosure of the Chemicals in Fracking

More than three-quarters (78%) of Americans would favor tighter disclosure requirements as well as studies of the health and environmental consequences of the chemicals used in natural gas drilling. Sixteen percent would oppose this.

- Women are more likely than men to say they would favor these disclosures (82% vs. 74%).
- The Northeast is somewhat more likely than any other region to favor this (85%).
- Politically speaking, Democrats are a little more in favor of this (85%) than are Independents (72%) or Republicans (74%).

Favoring Tighter Public Disclosure of the Chemicals in Fracking



20 Q6: How much would you support or oppose tighter public disclosure requirements as well as studies of the health and environmental consequences of the chemicals used in natural gas drilling? Would you... Base = 1,012.

If given the chance to speak with a member of Congress, government or state legislator, 72% of Americans would tell them that they come down on the side of energy generation that takes the environment and public health into consideration. Only 21% would tell their government official that energy generation comes first even at the cost of public health or depletion of resources.

- Women are more likely than men to say they favor energy generation that takes public health and the environment into consideration (81% vs. 63%).
- Men are more likely than women to favor energy generation over water conservation (30% vs. 13%).
- Politically speaking, Democrats (82%) and Independents (80%) are somewhat more in favor of energy that takes into consideration public health and the environment than are Republicans (62%).

Speaking Directly to Government About Energy and Water

When it comes to energy production I come down on the side of the public's health and the environment. I favor cleaner energy sources that use the least water.

72%

Energy production comes first. There are always risks and tradeoffs when it comes to public health and the environment.

21%

Don't know

6%

0% 10% 20% 30% 40% 50% 60% 70% 80%

Q7: If you could speak directly to your member of Congress, your governor or state leader, which of the following statements would you be most likely to make to them? Base = 1,012.

Where America Should Focus Future Energy Production

Americans make a clear choice in favor of developing new energy sources that require the least water and have minimal water pollution (81%) over developing energy sources that pollute water or create shortages (12%).

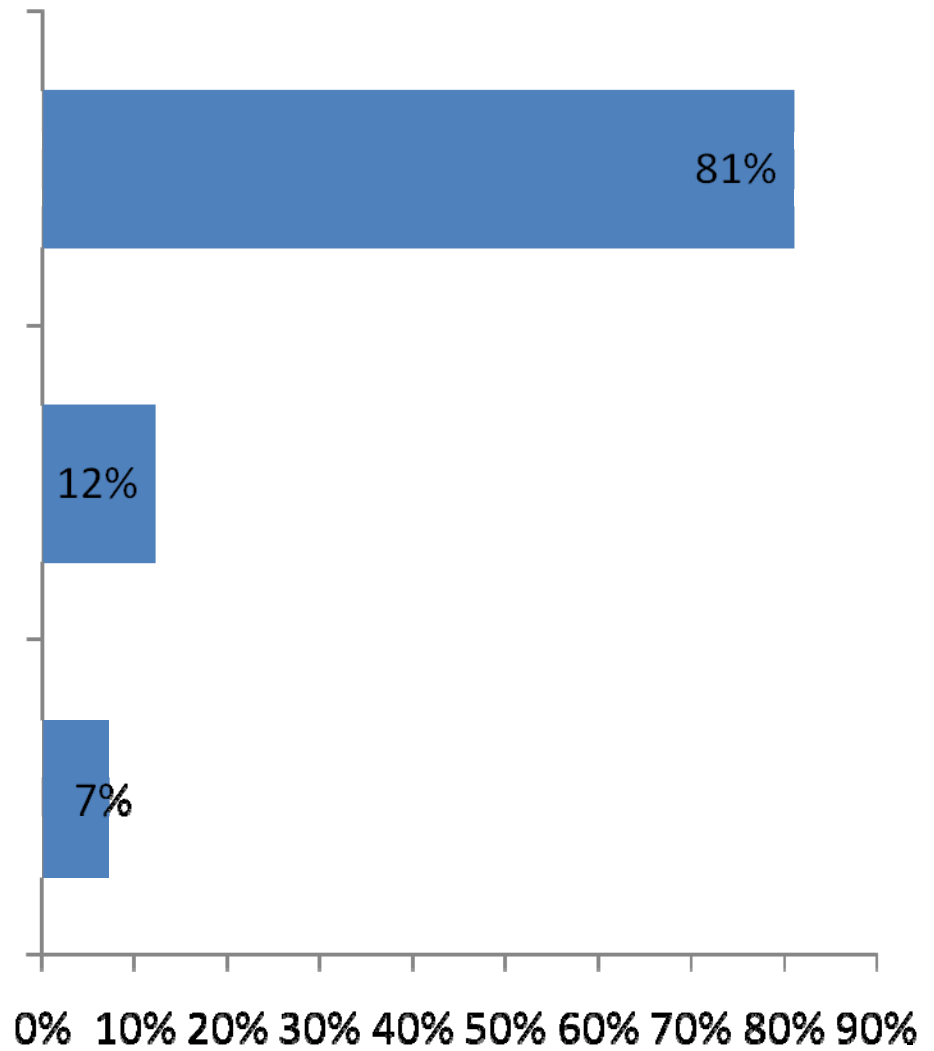
- Women are more likely than men to say they favor energy sources that conserve or don't pollute water (86% vs. 75%).
- Men are more likely than women to favor energy generation that may pollute water or cause shortages (16% vs. 9%).
- Politically speaking, Democrats (89%) and Independents (88%) are a little more in favor of energy that conserves or doesn't pollute water than are Republicans (71%).

Where America Should Focus Future Energy Production

Water shortages and clean drinking water are real concerns. America should put the emphasis on first developing new energy sources that require the least water and have minimal water pollution.

Energy supply needs should override concerns about water shortages and water pollution. America should proceed first with developing energy sources even if they may pollute water or create shortages.

Don't know

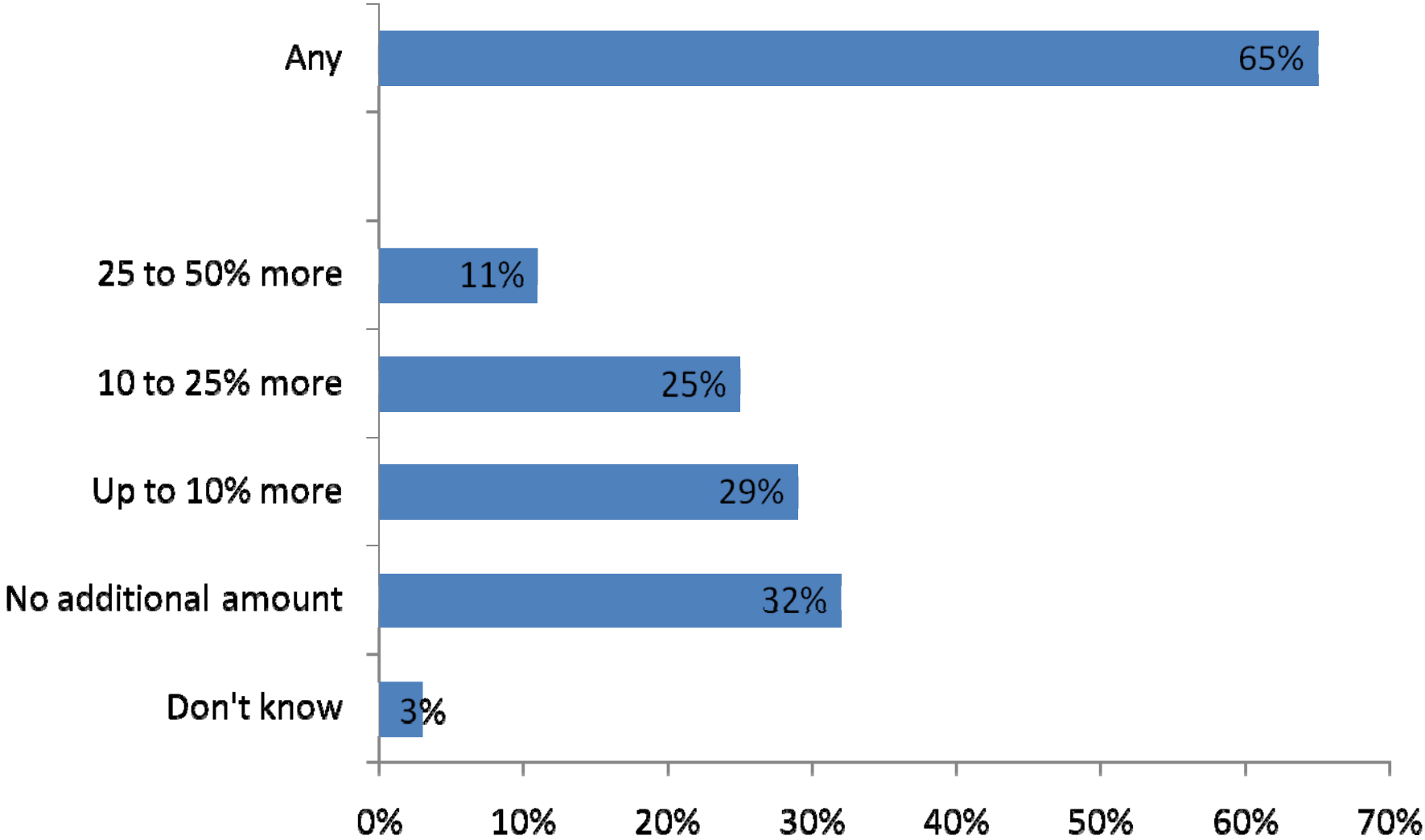


Q8: Which of the following statements best expresses your view about where America should focus its energy production in the future? Base = 1,012.

Most Americans (65%) are willing to pay more for their energy if the additional cost pays for the development of renewable energy sources that protect the air and water better than other choices. Thirty-two percent would not pay anything additional.

- Younger respondents aged 18-34 are the most likely age group to say they would be willing to pay something additional (77%).
- Politically speaking, Democrats (78%) are more in favor of paying more for energy that protects the air and water than are Independents (59%) or Republicans (55%).

Paying More for Renewable Energy Sources



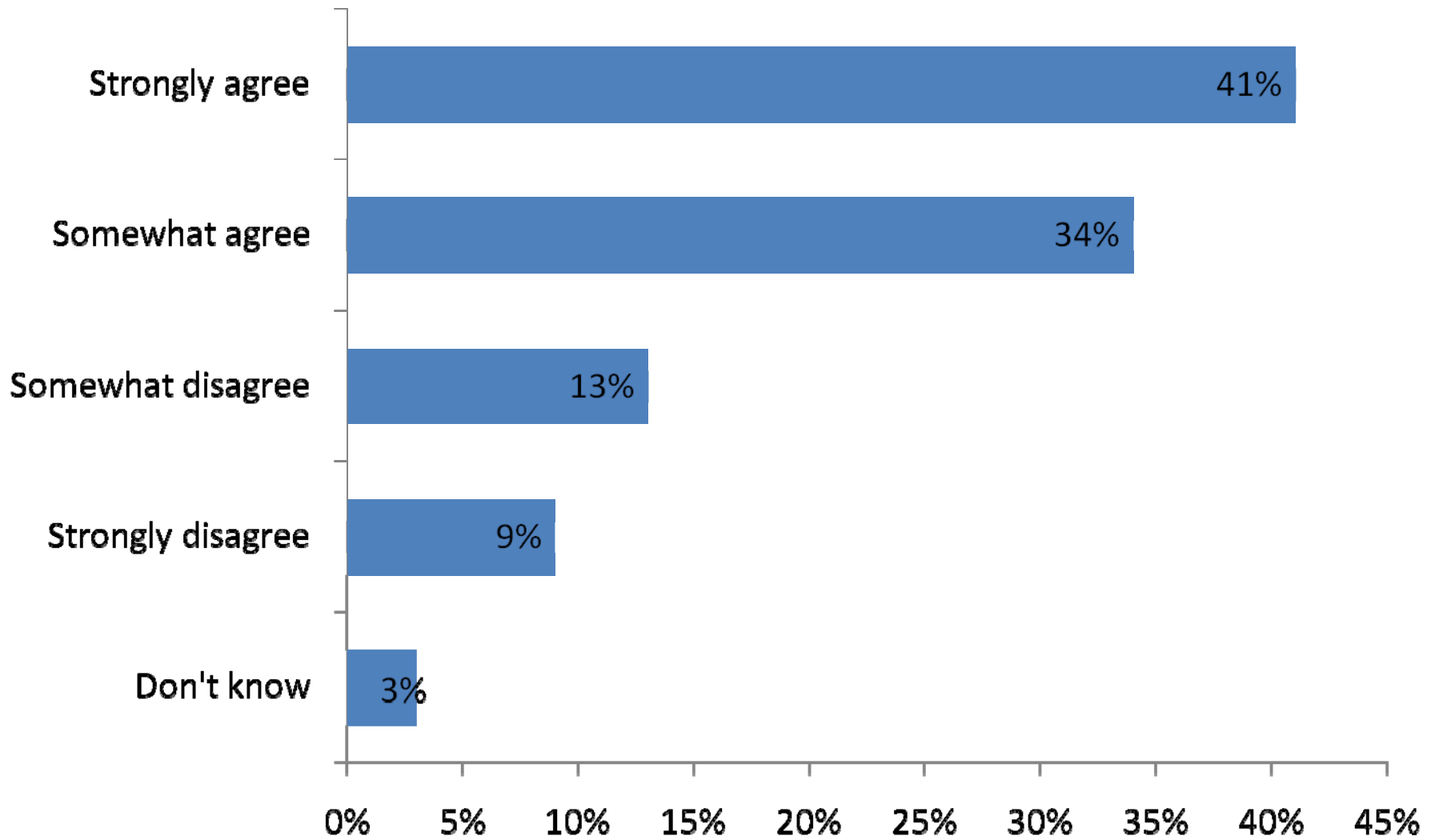
Q9: How much more would you be willing to pay in terms of energy costs for the development of renewable energy sources that protect the air and water better than other alternatives? Would you say...? Base = 1,012.

Smart Energy Choices are the Key to Creating New Jobs

Three quarters of Americans agree that the key to creating new jobs and a healthy and safe future, is making smarter energy choices. Twenty-two percent disagree.

- Women are far more likely than men to agree with this statement (81% vs. 69%).
- Younger respondents aged 18-34 are the most likely age group to say they agree that this is the key to job creation and a clean future (85%).
- Regionally, those in the Northeast (82%) and the West (80%) are more likely to agree than those in the South (70%) or the Midwest (71%).
- Politically speaking, Democrats (86%) and Independents (83%) are more likely to agree than Republicans (62%).

Smart Energy Choices are the Key to Creating New Jobs



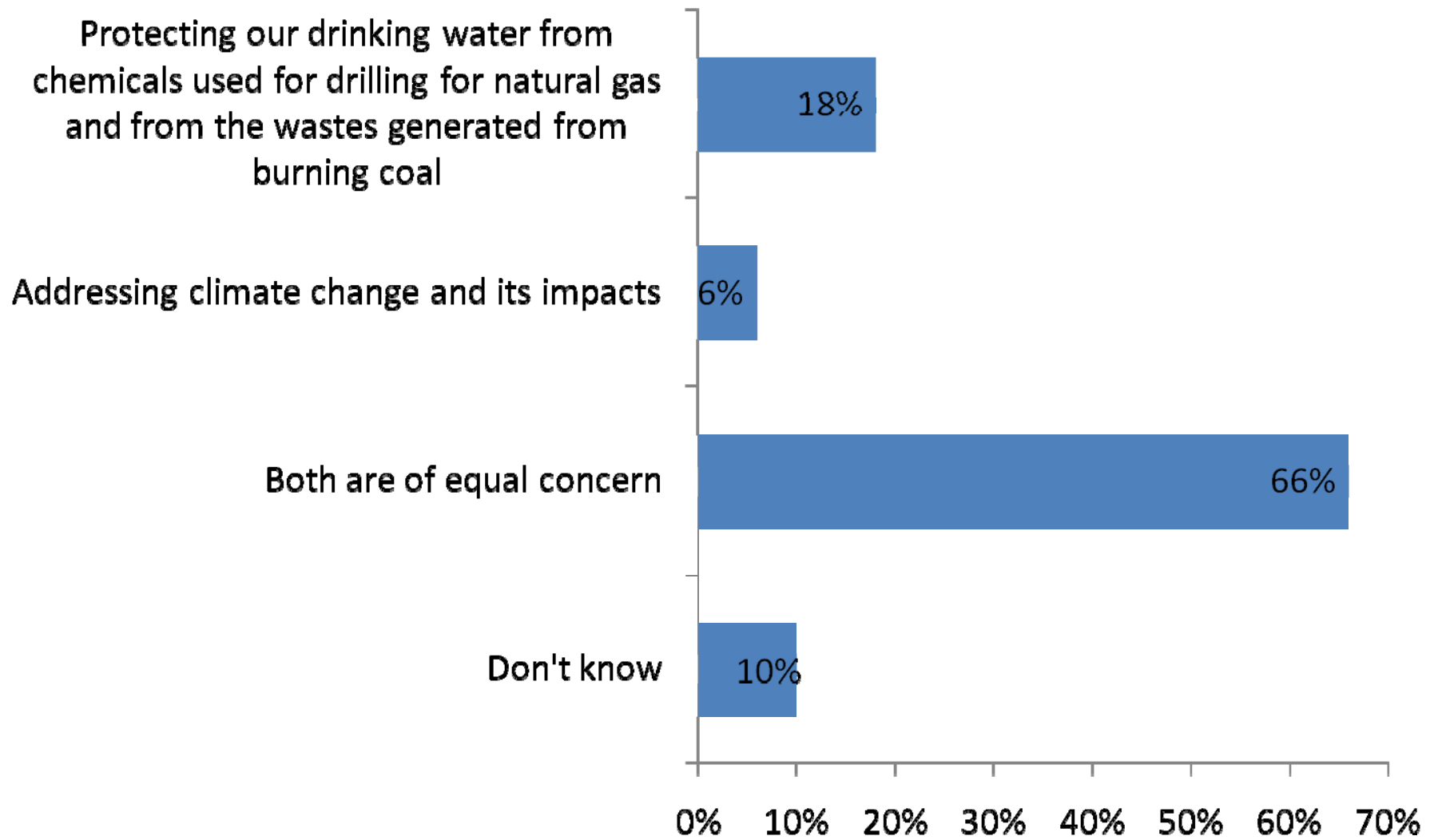
Q10: To what degree do you agree or disagree with the following statement? Smarter energy choices are the key to creating new jobs and a future that is healthy and safe because fossil fuels create toxic wastes that are a threat to our health and safety. Do you... Base = 1,012.

Most Urgent Concern Today

Americans have a hard time choosing between climate change (6%) and protecting our drinking water (18%) as the most urgent concern today. Most (66%) believe both are of equal concern.

- Younger respondents aged 18-34 are the most likely age group to say they are of equal concern (75%).
- Politically speaking, Democrats (79%) and Independents (71%) are more likely to say they are of equal concern than Republicans (53%).

Most Urgent Concern Today



Q11: Which of the following do you believe is the most urgent concern today? Base = 1,012.

*Topline results of 1,012 telephone interviews with American adults,
conducted November 26-28, 2010.*

The following questions are about a natural gas drilling process sometimes referred to as 'fracking', which requires large amounts of water. 'Fracking' involves blasting millions of gallons of water mixed with chemicals and sand into the ground to release natural gas from rock formations thousands of feet underground. Concerned homeowners and others say the process can poison drinking water supplies but oil and gas industry representatives say there's no proof that 'fracking' chemicals have contaminated drinking water.

D1 Prior to this survey, how aware would you say you were about this issue? Were you . . .
(READ ENTIRE LIST BEFORE RECORDING ONE ANSWER)

19% Very aware
25% Somewhat aware
13% Not very aware
43% Not aware at all
* DON'T KNOW/NOT SURE

<p>IF VERY/SOMEWHAT AWARE OF ISSUE, D1 [01-02], CONTINUE. ALL OTHERS SKIP TO D6</p>

D2 Still thinking of the natural gas drilling process sometimes referred to as 'fracking', how concerned are you about this issue as it relates to water quality? Would you say . . .
(READ ENTIRE LIST BEFORE RECORDING ONE ANSWER)
BASE = 493 ADULTS VERY OR SOMEWHAT AWARE OF FRACKING

40% Very concerned
29% Somewhat concerned
15% Not very concerned
16% Not concerned at all
* DON'T KNOW/NOT SURE

D3 I have another question about the natural gas drilling process sometimes referred to as 'fracking'. Do you think that state and national officials are doing enough to require proper disclosure of the chemicals used in natural gas drilling? Would you say they are . . .
(READ ENTIRE LIST BEFORE RECORDING ONE ANSWER)

10% Doing everything they should
23% Doing some of what they should
42% Not doing as much as they should
14% Or, not doing anything at all
10% DON'T KNOW/NOT SURE

- D4 Based on what you know or have heard about the chemicals used in ‘fracking’, how concerned would you be to have such an energy project close enough to your home that there was even a small chance that it could have an impact on your drinking water? Are you . . .
(READ ENTIRE LIST BEFORE RECORDING ONE ANSWER)

58% Very concerned
15% Somewhat concerned
11% Not very concerned
15% Not concerned at all
1% DON’T KNOW/NOT SURE

- D5 I want you to imagine a situation where a natural gas drilling project was proposed close enough to your home that there might be an impact on the quality of your drinking water.

How likely would it be that you would get involved at the community level to raise concerns about such a ‘fracking’ project? Would you be . . .
(READ ENTIRE LIST BEFORE RECORDING ONE ANSWER)

42% Very likely
27% Somewhat likely
16% Not very likely
13% Not likely at all
1% DON’T KNOW/NOT SURE

[ASK EVERYONE]

- D6 Congress and most states do not require energy companies that drill for natural gas to disclose the chemicals used in the process, even though there are concerns about the potential for contamination of drinking water and other bodies of water.

How much would you support or oppose tighter public disclosure requirements as well as studies of the health and environmental consequences of the chemicals used in natural gas drilling? Would you . . .
(READ ENTIRE LIST BEFORE RECORDING ONE ANSWER)

BASE = 1,012 ADULTS

49% Strongly support
29% Somewhat support
8% Somewhat oppose
8% Strongly oppose
6% DON’T KNOW/NOT SURE

D7 If you could speak directly to your member of Congress, your governor or state lawmaker, which of the two following statements would you be **MOST LIKELY** to make to them?
(READ ENTIRE LIST BEFORE RECORDING ONE ANSWER)
[ROTATE]

72% When it comes to energy production that requires large amounts of water or where water quality is in jeopardy as a result of the energy production, my vote would be for coming down on the side of the public's health and the environment. We should favor cleaner energy sources that use the least water and involve the lowest possible risk to the public and environment (or)

21% When it comes to energy production that requires large amounts of water or where water quality is in jeopardy as a result of the energy production, my view is that energy production priorities have to come first. There is always going to be some risk involved when it comes to energy production. We have to accept that there are going to be tradeoffs when it comes to the public's health and the environment (or)

6% DON'T KNOW/NOT SURE

D8 Which of the following statements **BEST** expresses your view about where America should focus its energy production in the future?
(READ ENTIRE LIST BEFORE RECORDING ONE ANSWER)
[ROTATE]

81% Water shortages and clean drinking water are real concerns. America should put the emphasis on first developing new energy sources that require the least water and have minimal water pollution (or)

12% Energy supply needs should override concerns about water shortages and water pollution. America should proceed first with developing energy sources even if they may pollute water or create water shortages (or)

7% DON'T KNOW/NOT SURE

D9 How much more would you be willing to pay in terms of energy costs for the development of renewable energy sources that protect the air and water better than other alternatives? Would you say . . .
(READ ENTIRE LIST BEFORE RECORDING ONE ANSWER)

11% 25 to 50 % more
25% 10 to 25% more
29% Up to 10% more
32% Or, no additional amount
3% DON'T KNOW/NOT SURE

- D10 To what degree do you agree or disagree with the following statement? Smarter energy choices are the key to creating new jobs and a future that is healthy and safe because fossil fuels create toxic wastes that are a threat to our health and safety.

Do you . . .

(READ ENTIRE LIST BEFORE RECORDING ONE ANSWER)

41%	Strongly agree
34%	Somewhat agree
13%	Somewhat disagree
9%	Strongly disagree
3%	DON'T KNOW/NOT SURE

- D11 Which of the following do you believe is the MOST URGENT concern today?

(READ ENTIRE LIST BEFORE RECORDING ONE ANSWER)

[ROTATE 01-02]

6%	Addressing climate change and its impacts
18%	Protecting our drinking water from chemicals used in drilling for natural gas and from the wastes generated from burning coal
66%	Or, these are both major concerns of roughly equal concern to you
10%	DON'T KNOW/NOT SURE